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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,114

Applicant(s)

GABRIEL ET AL.

Examiner

Garrett Smith

Art Unit

2168

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-912)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 25 January 2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is regarding Applicant's response filed 25 January 2010 to a prior Office Action. Claims 13 – 32 are pending. Claims 13, 20, 29 and 30 are amended.
2. This Office Action is the **Fifth Action, Non-Final Rejection**.

Continued Examination under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 January 2010 has been entered.

Information Disclosure Statement

4. The Examiner has considered the Information Disclosure Statement filed 25 January 2010. A copy of the annotated IDS is enclosed with this Office Action.

Response to Arguments

Claim Objections

5. The Examiner notes the corrections to the claims and therefore the objections to the claims are **withdrawn**.

35 USC § 112, Second Paragraph

6. Applicant's amendments, filed 25 January 2010, regarding the rejection under 35 USC § 112, Second Paragraph of claims 13 – 32 have been fully considered and are persuasive. For these reasons, the rejection under 35 USC § 112, Second Paragraph of claims 13 – 32 is **withdrawn**.

35 USC § 103(a)

7. Applicant's arguments (page 10 – 15) and amendments, filed 25 January 2010, regarding the rejection under 35 USC § 103(a) of claims 13 – 32 have been fully considered and they are persuasive in part.

Applicant first argues that the Noticed subject matter is not "Applicant Admitted Prior Art" because it was never admitted as such by Applicant. MPEP 2144.03(C) states,

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b)... If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate.

The Examiner took Official Notice of two separate facts (explicitly shown in the rejection of claims 14, 15 and 27 and the rejection of claims 16, 17 and 19). The first fact the Examiner took notice of that there are more than one type of geolocation

classification. The Examiner asserted that a person of ordinary skill in the art at the time of invention would both recognize and use more than one type of geolocation classification such as airport, country, state, continent, geographic region, hemisphere, planet (i.e. the list can go on). Molger suggests the use of the city type. Thus, it would be reasonable to have a person of ordinary skill in the art at the time of invention to include geolocation classifications of greater or lower granularity with that of Faltings and Molger. As Applicant's attempted traversal of this fact is inadequate and Applicant has not articulated why a person of ordinary skill in the art would not have known this Noticed fact.

The second fact the Examiner took Official Notice of is the use of Significant figures or rounding. Applicant does not appear to challenge the taking of Official Notice for this fact. However, Applicant argues does discuss why Applicant believes that the cited references do not teach the corresponding feature in the claims. This will be treated by the Examiner later in this section.

Applicant argues that the cited references fail to teach "managing a database system of the computerized travel reservation system." The Examiner respectfully disagrees. The Examiner submits that "managing" is an extremely broad recitation. "Managing" includes a number of operations from adding and deleting data to permissions management. Further, the Examiner notes that, as the claim is constructed, the "managing" limitation is satisfied if the "by" statement is satisfied. Also, even generating a "graphical user interface for a user" can fall under "managing" a

database if the GUI connects to the database to allow for modification of data in the database (which is the case here).

Applicant argues that Faltings in view of Mogler fail to teach the priority rank and table of geographic zones. As discussed above, the Examiner relied on Official Notice to teach the multiple zones. The Examiner agrees that the priority rank has a "value" that is dependant on the granularity is not explicitly taught by the applied references. However, the Examiner submits that Anderson et al. (US PGPUB 2003/0074471 A1) teaches a probability or confidence factor can be associated with a particular level of a geographic granularity. Therefore, the Examiner submits it would have been obvious to include the geographic precision confidence factor function with the system of Faltings et al. and Mogler et al. because it provides for a way to numerically determine the granularity for easier processing.

Applicant further argues that the "significant figures" with the cited references fail to teach the claimed invention. The Examiner maintains that "combining" is extremely broad in that it can be any one of many mathematical operations including (but not limited to) addition, subtraction etc. Another operation used in mathematics is the concept of significant figures. "Significant figures" is a measure of precision of a particular value. Thus, in multiplication when there are unequal numbers of significant figures, the least number of significant figures are selected. For example, a first number 1.03 has 3 significant figures and a second number 1.0 has 2 significant figures. If these numbers are added (or another mathematical operation) together, the result would be a number with 2 significant figures. The same concept can be applied with

priorities. If there is a first priority and a second priority with the second being more significant than the first, the first priority can be selected. The Examiner believes Applicant broad reaction of combining does not specifically point out the methodology used and thus can be any number of ways to "combine" the priorities. Further,

For these reasons, the rejection under 35 USC § 103(a) of claims 13 – 32 is **withdrawn**. However, new grounds of rejection are provided below.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims **13, 18, 22 – 26 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Faltings et al.* (US Patent Application 2003/0033164, hereafter

"Faltings") in view Mogler et al. (US Patent Application 2003/0110062, hereafter "Mogler") in view of Anderson et al. (US PG PUB 2003/0074471 A1).

11. In regard to **claim 13**, Faltings teaches a method for storing and accessing data in databases of a computerized travel reservation system, comprising the steps of:

Creating and storing rules (*see travel segments and constraint are the rules, in paragraph [0033] and [0034]; travel information database stores all the travel segments and constraints, in paragraph [0027]*) for accessing database data in a database system of a computerized travel reservation system, the data being service information applicable to flights (*intended use recitation and thus has no patentable weight*),

each rule comprising a criteria section containing at least one criterion (*see selection of trip in Fig. 3 item#46*) used for definition of the flights to which the rule is applicable (*intended use recitation and thus has no patentable weight*), and a content section containing data (*see constraint refers to the data value of travel itinerary, in paragraph [0034]*) corresponding to a type of service information applicable said applicable flight,

the at least one criterion in each rule being a market pair (*see origin and destination airport, in paragraph [0033]*), the market pair comprising i) an origin market defining a geographic zone of departure of the flight and ii) a destination market defining a geographic zone of arrival of the flight (*see geographical representation of origin and destination market, in Fig. 3 item#48*);

wherein the origin market and the destination market each correspond to at least one geographic zone type from the group consisting of an airport geographic zone type,

a city geographic zone type, a state and country geographic zone type, a country geographic zone type, a geographic region geographic zone type, and a world geographic zone type (*see geographical representation of origin and destination market, in Fig. 3 item#48; the Examiner further notes that only one type of zone is required*);

Storing the created rules in a database on a computer readable medium (*see travel information database stores all the travel segments and constraints, in paragraph [0027]*); and

Receiving a request for a flight search and the computerized travel reservation system accessing the content of the stored rules in response to a request for a flight search pertaining to a selected market pair, and returning one of the stored rules based on a priority of the selected market pair as indicated by the priority rank associated with the geographic zone type of the origin market and the priority rank associated with the geographic zone type of the destination market of the select market pair (*see identify itineraries by accessing a travel information database, in paragraph [0040]*).

Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose creating a table of geographical zone types and a priority rank having a value associating with each geographical zone type, the priority rank associated with each geographical zone type decreasing as a function of the precision of the associated geographical zone type. Mogler discloses creating a table of geographical zone types and a priority rank associating with each geographical zone type (*see priority rank associated with city code, in Fig. 4 item#312*). It would have been obvious to one having ordinary skill in the

art at the time the invention was made to combine priority rank of Mogler with Faltings because it would help to get an optimal solution (*see paragraph [0010] of Mogler*).

Anderson et al. (US PGPUB 2003/0074471 A1) teaches a probability or confidence factor can be associated with a particular level of a geographic granularity (see [0138]). Therefore, it would have been obvious to include the geographic precision confidence factor function with the system of Faltings et al. and Mogler et al. because it provides for a way to numerically determine the granularity for easier processing.

12. In regard to **claim 18**, Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose additional criteria used for selection of a trip; and assigning, to each of the additional criterion, a value corresponding to a weight based on a degree of importance of each additional criterion, wherein, a total weight of each rule is a total of the weights assigned to the additional criteria. Mogler disclose additional criteria used for selection of a trip; and assigning, to each of the additional criterion, a value corresponding to a weight based on a degree of importance of each additional criterion, wherein, a total weight of each rule is a total of the weights assigned to the additional criteria (see an additional criterion target share is assigned, in Fig. 4 item#310). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine an additional criterion of Mogler with Faltings because it would help to get optimal solution (*see paragraph [0010] of Mogler*).

13. In regard to claims **22 – 26 and 28**, these claims recite specific “service information”. The “service information” is accorded no patentable weight because it is content. See arguments provided in the arguments section.

14. Claims **14, 15 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltings et al. (US Patent Application 2003/0033164, hereafter “Faltings”) in view Mogler et al. (US Patent Application 2003/0110062, hereafter “Mogler”) in view of Anderson et al. (US PG PUB 2003/0074471 A1) and further in view of Official Notice (based on Mogler).

15. In regard to **claim 14**, Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose created table includes at least i) the airport geographic zone type with a first priority rank, ii) the city geographic zone type with a second priority rank greater than the first priority rank, iii) the country geographic zone type with a third priority rank greater than the second priority rank, and iv) the geographic region geographic zone type with a fourth priority rank greater than the third priority rank. Mogler discloses using of priority ranks for different elements (see priority rank is different for different city, in Fig. 4 item#312). Neither Faltings nor Mogler explicitly discloses all four types (airport, city, country, region). The only type explicitly recited is the city type by Mogler in Figure 4. However, the Examiner submits that a person of ordinary skill in the art at the time of invention would recognize how to place addition zone types into a table and thus takes Official Notice for this subject matter. Adding various zone types into a table

is a trivial activity for a person of ordinary skill because it only requires basic database techniques (or even a ruler, a pencil and a sheet of paper to draw the table and fill out the rows and columns). Thus, it would have been obvious to a person of ordinary skill in the art at the time of invention to use various zone types with that of Faltings and Mogler because a table with various zone types with associated priorities can be used to facilitate operations regarding other tables such as the operations of sorting or searching based on priority).

16. In regard to **claim 15**, Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not explicitly disclose the origin market is a first geographical zone type and the destination market is a different, second geographical zone type. Mogler discloses the origin market is a city and the destination market is a different city (see priority rank is different for different city, in Fig. 4 item#312). Thus, Mogler teaches that the two markets can be different. As shown by the discussion of claim 14, neither Faltings nor Mogler explicitly discloses multiple zone types. However, the Examiner submits that having different geographical zone types would have been well known to a person of ordinary skill in the art and would have been trivial to implement. The specific zones (airport, city, country, geographic region) are well known in the art as criteria to be used in limiting searches. Thus, it would have been obvious to a person of ordinary skill in the art at the time of invention to use various zone types with that of Faltings and Mogler because a table with various zone types with associated priorities can be used to

facilitate operations regarding other tables such as the operations of sorting or searching based on priority).

17. In regard to **claim 27**, "the service information, applicable to the flights within the creating rules for accessing database data, is the numbers of the loading terminals for the applicable flights so that loading terminals are determinable, via the defined market pair, for flights between the origin market and the destination market of the defined market pair" is considered to be content and thus has no patentable weight (*see arguments provided in the Arguments section*).

18. Claims **16 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltings et al. (US Patent Application 2003/0033164, hereafter "Faltings") in view of Mogler et al. (US Patent Application 2003/0110062, hereafter "Mogler") in view of Anderson et al. (US PG PUB 2003/0074471 A1) and further in view of Winter et al (US Patent Application 2001/0007088, hereafter "Winter").

19. In regard to **claim 16**, Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose calculating a priority of each market pair by i) assigning a first priority value to the origin market based on the priority rank associated with the geographical zone type of the origin market, ii) assigning a second priority value to the destination market based on the priority rank associated with the geographical zone type of the destination market, and iii) combining the first priority and the second priority. Mogler teaches assigning priority values to the origin and destination markets (paragraph [0041]).

However, both Moger and Faltings are silent as to "combining" the two priorities. The Examiner notes that "combining" is extremely broad in that it can be any of many mathematical operations including (but not limited to) addition, subtraction etc. Another operation used in mathematics is the concept of significant figures. "Significant figures" is a measure of precision of a particular value. Thus, in multiplication when there are unequal numbers of significant figures, the least number of significant figures are selected. For example, a first number 1.03 has 3 significant figures and a second number 1.0 has 2 significant figures. If these numbers are added (or another mathematical operation) together, the result would be a number with 2 significant figures. The same concept can be applied with priorities. If there is a first priority and a second priority with the second being more significant than the first, the first priority can be selected. As such, Winter discloses combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value (see combining priority values of more the one cities, in paragraph [0060] and finding the lowest priority value, in paragraph [0062]) Thus, it would have been obvious to one having ordinary skill in the art at the time the invention to include the concept of significant figures with the priority determinations of Mogler with Faltings because significant figures allows of a systematic and accepted way for determination of the priority of the total element in a fast and efficient manner.

20. In regard to **claim 19**, Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose the first criteria section for at least some of the rules, additional criteria used for selection of a trip; and assigning, to each of the additional criterion, a value corresponding to a weight based on a degree of importance of each additional criterion, wherein, a total weight of each rule is a total of the weights assigned to the additional criteria. Mogler disclose the first criteria section for at least some of the rules, additional criteria used for selection of a trip; and assigning, to each of the additional criterion, a value corresponding to a weight based on a degree of importance of each additional criterion, wherein, a total weight of each rule is a total of the weights assigned to the additional criteria (see weight is assigned to the additional criterion, in Fig. 4 item#310). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine assigning weight to the additional criterion of Mogler with Faltings because it would help to get optimal solution (see paragraph [0010] of Mogler).

21. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faltings et al. (US Patent Application 2003/0033164, hereafter "Faltings") in view of Mogler et al. (US Patent Application 2003/0110062, hereafter "Mogler") in view of Anderson et al. (US PGPUB 2003/0074471 A1) in view of Official Notice (based on Mogler) and further in view of Winter et al (US Patent Application 2001/0007088, hereafter "Winter").

22. In regard to **claim 17**, Faltings and Mogler disclose a method for storing and accessing data in databases of a computerized travel reservation system. Mogler discloses using of priority ranks for different elements (see priority rank is different for different city, in Fig. 4 item#312). The type explicitly recited is the city type by Mogler in Figure 4. However, the Examiner submits that a person of ordinary skill in the art at the time of invention would recognize how to place addition zone types into a table and thus takes Official Notice for this subject matter. Adding various zone types into a table is a trivial activity for a person of ordinary skill because it only requires basic database techniques (or even a ruler, a pencil and a sheet of paper to draw the table and fill out the rows and columns). Thus, it would have been obvious to a person of ordinary skill in the art at the time of invention to use various zone types with that of Faltings and Mogler because a table with various zone types with associated priorities can be used to facilitate operations regarding other tables such as the operations of sorting or searching based on priority).

Mogler teaches assigning priority values to the origin and destination markets (paragraph [0041]). However, both Moger and Faltings are silent as to "combining" the two priorities. The Examiner notes that "combining" is extremely broad in that it can be any of many mathematical operations including (but not limited to) addition, subtraction etc. Another operation used in mathematics is the concept of significant figures. "Significant figures" is a measure of precision of a particular value. Thus, in multiplication when there are unequal numbers of significant figures, the least number of significant figures are selected. For example, a first number 1.03 has 3 significant

figures and a second number 1.0 has 2 significant figures. If these numbers are added (or another mathematical operation) together, the result would be a number with 2 significant figures. The same concept can be applied with priorities. If there is a first priority and a second priority with the second being more significant than the first, the first priority can be selected. As such, Winter discloses combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value (see combining priority values of more than one cities, in paragraph [0060] and finding the lowest priority value, in paragraph [0062]) Thus, it would have been obvious to one having ordinary skill in the art at the time the invention to include the concept of significant figures with the priority determinations of Mogler with Faltings because significant figures allows of a systematic and accepted way for determination of the priority of the total element in a fast and efficient manner.

23. Claims **20 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltings et al. (US Patent Application 2003/0033164, hereafter "Faltings") in view of Mogler et al. (US Patent Application 2003/0110062, hereafter "Mogler") in view of Anderson et al. (US PG PUB 2003/0074471 A1) and further in view of Winter et al (US Patent Application 2001/0007088, hereafter "Winter").

24. In regard to **claim 20**, Faltings and Mogler disclose creating a reservation request by entering a origin market and a destination market as part of a trip search; searching the stored rules to find rules with market pairs agreeing with both the origin

market and the destination market entered for the reservation request; for the rules found to having market pairs agreeing with both the origin market and the destination market, for each rule, computing the priority value of each market pair by i) assigning a priority value to the origin market based on the priority rank associated with each geographical zone type of the origin market, ii) assigning a second priority value to the destination market based on the priority rank associated with each geographical zone type of the destination market. However Faltings and Mogler do not disclose combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value. Winter discloses combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value (see combining priority values of more the one cities, in paragraph [0060] and finding the lowest priority value, in paragraph [0062]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine priority values of different cities of Winter with Faltings and Mogler because it would help to get optimal solution (see paragraph [0010] of Mogler).

25. In regard to **claim 21**, Faltings and Mogler disclose a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings and Mogler do not disclose returning the content of the rule having the market

pair with the lowest computed priority value, of two rules having the same lowest computed priority value, returning the content of the rule having the origin market with the lowest priority value. Winter disclose returning the content of the rule having the market pair with the lowest computed priority value, of two rules having the same lowest computed priority value, returning the content of the rule having the origin market with the lowest priority value (see principal minimization applies if two priority values are the same, in paragraph [0062]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to principal minimization of Winter with Faltings and Mogler because it would help to get optimal solution (see paragraph [0010] of Mogler).

26. Claims **29 – 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Faltings et al. (US Patent Application 2003/0033164, hereafter "Faltings") in view Mogler et al. (US Patent Application 2003/0110062, hereafter "Mogler") in view of Anderson et al. (US PG PUB 2003/0074471 A1) and in further in view of Winter et al (US Patent Application 2001/0007088, hereafter "Winter").

27. In regard to **claim 29**, Faltings et al. teaches a method for storing and accessing data in databases of a computerized travel reservation system, comprising the steps of:

Defining market pairs for storage in the database system of the computerized travel reservation system (*see origin and destination airport, in paragraph [0033]*),

wherein each market pair comprises i) an origin market defining a geographic zone of departure of flights and ii) a destination market defining a

geographic zone of arrival of the flights (*see geographical representation of origin and destination market, in Fig. 3 item#48*),

storing flight trip rules in a database system of a computerized travel reservation, each rule comprising i) a set of criteria defining a flight to which the rule applies, the set of criteria comprising one of the market pairs and additional selection criteria concerning service information applicable to the applicable flight, and ii) a content representing a weight value of the criteria defining the flight (*see travel segments and constraint are the rules, in paragraph [0033] and [0034]; travel information database stores all the travel segments and constraints, in paragraph [0027]*);

wherein a weight is assigned to each additional criteria in the set of criteria of each trip information, the weight assigned to each additional criteria defining a degree of importance of each additional criteria (*outside claim scope, thus this limitation has no patentable weight*),

wherein the content representing the weight value of the criteria defining the flight is determined from the priority of each market pair and the weight of each additional criteria of the trip information (*outside claim scope, thus this limitation has no patentable weight*); and

the computerized travel reservation system responding to a trip search comprised of first origin market and a first destination market, by

i) accessing a flight trip rule by searching the stored market pairs of the stored trip information for plural market pairs agreeing with the first origin market

and the first destination market (*see identify itineraries by accessing a travel information database, in paragraph [0040]*),

Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose creating a table of geographical zone types and a priority rank associating with each geographical zone type, the priority rank associated with each geographical zone type decreasing as a function of the precision of the associated geographical zone type. Mogler discloses creating a table of geographical zone types and a priority rank associating with each geographical zone type (*see priority rank associated with city code, in Fig. 4 item#312*). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine priority rank of Mogler with Faltings because it would help to get an optimal solution (*see paragraph [0010] of Mogler*).

Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose calculating a priority of each market pair by i) assigning a first priority value to the origin market based on the priority rank associated with the geographical zone type of the origin market, ii) assigning a second priority value to the destination market based on the priority rank associated with the geographical zone type of the destination market, and iii) combining the first priority and the second priority. Mogler teaches assigning priority values to the origin and destination markets (paragraph [0041]). However, both Moger and Faltings are silent as to "combining" the two priorities. The Examiner notes that "combining" is extremely broad in that it can be any of many mathematical operations

including (but not limited to) addition, subtraction etc. Another operation used in mathematics is the concept of significant figures. "Significant figures" is a measure of precision of a particular value. Thus, in multiplication when there are unequal numbers of significant figures, the least number of significant figures are selected. For example, a first number 1.03 has 3 significant figures and a second number 1.0 has 2 significant figures. If these numbers are added (or another mathematical operation) together, the result would be a number with 2 significant figures. The same concept can be applied with priorities. If there is a first priority and a second priority with the second being more significant than the first, the first priority can be selected. As such, Winter discloses combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value (see combining priority values of more than one cities, in paragraph [0060] and finding the lowest priority value, in paragraph [0062]). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention to include the concept of significant figures with the priority determinations of Mogler with Faltings because significant figures allows of a systematic and accepted way for determination of the priority of the total element in a fast and efficient manner.

Faltings and Mogler disclose a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings and Mogler do not disclose returning the content of the rule having the market pair with the lowest computed priority value, of two rules having the same lowest computed priority value,

returning the content of the rule having the origin market with the lowest priority value. Winter disclose returning the content of the rule having the market pair with the lowest computed priority value, of two rules having the same lowest computed priority value, returning the content of the rule having the origin market with the lowest priority value (see principal minimization applies if two priority values are the same, in paragraph [0062]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to principal minimization of Winter with Faltings and Mogler because it would help to get optimal solution (see paragraph [0010] of Mogler).

Faltings and Mogler disclose creating a reservation request by entering a origin market and a destination market as part of a trip search; searching the stored rules to find rules with market pairs agreeing with both the origin market and the destination market entered for the reservation request; for the rules found to having market pairs agreeing with both the origin market and the destination market, for each rule, computing the priority value of each market pair by i) assigning a priority value to the origin market based on the priority rank associated with each geographical zone type of the origin market, ii) assigning a second priority value to the destination market based on the priority rank associated with each geographical zone type of the destination market. However Faltings and Mogler do not disclose combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value. Winter discloses combining the priority values of the origin market with the

priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value (see combining priority values of more than one cities, in paragraph [0060] and finding the lowest priority value, in paragraph [0062]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine priority values of different cities of Winter with Faltings and Mogler because it would help to get optimal solution (see paragraph [0010] of Mogler).

Anderson et al. (US PGPUB 2003/0074471 A1) teaches a probability or confidence factor can be associated with a particular level of a geographic granularity (see [0138]). Therefore, it would have been obvious to include the geographic precision confidence factor function with the system of Faltings et al. and Mogler et al. because it provides for a way to numerically determine the granularity for easier processing.

28. In regard to **claim 30**, Faltings discloses a method for storing and accessing data in databases of a computerized travel reservation system. However Faltings does not disclose created table includes at least i) the airport geographic zone type with a first priority rank, ii) the city geographic zone type with a second priority rank greater than the first priority rank, iii) the country geographic zone type with a third priority rank greater than the second priority rank, and iv) the geographic region geographic zone type with a fourth priority rank greater than the third priority rank. Mogler discloses using of priority ranks for different elements (see priority rank is different for different city, in Fig. 4 item#312). Neither Faltings nor Mogler explicitly discloses all four types

(airport, city, country, region). The only type explicitly recited is the city type by Mogler in Figure 4. However, the Examiner submits that a person of ordinary skill in the art at the time of invention would recognize how to place addition zone types into a table and thus takes Official Notice for this subject matter. Adding various zone types into a table is a trivial activity for a person of ordinary skill because it only requires basic database techniques (or even a ruler, a pencil and a sheet of paper to draw the table and fill out the rows and columns). Thus, it would have been obvious to a person of ordinary skill in the art at the time of invention to use various zone types with that of Faltings and Mogler because a table with various zone types with associated priorities can be used to facilitate operations regarding other tables such as the operations of sorting or searching based on priority).

29. In regard to **claim 31**, Faltings and Mogler disclose creating a reservation request by entering a origin market and a destination market as part of a trip search; searching the stored rules to find rules with market pairs agreeing with both the origin market and the destination market entered for the reservation request; for the rules found to having market pairs agreeing with both the origin market and the destination market, for each rule, computing the priority value of each market pair by i) assigning a priority value to the origin market based on the priority rank associated with each geographical zone type of the origin market, ii) assigning a second priority value to the destination market based on the priority rank associated with each geographical zone type of the destination market. However Faltings and Mogler do not disclose combining the priority values of the origin market with the priority values of the destination market

to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value. Winter disclose combining the priority values of the origin market with the priority values of the destination market to define the computer priority value of the market pair of the rule; and responsive to the trip search, returning the content of the rule having the market pair with the lowest computed priority value (see combining priority values of more the one cities, in paragraph [0060] and finding the lowest priority value, in paragraph [0062]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine priority values of different cities of Winter with Faltings and Mogler because it would help to get optimal solution (see paragraph [0010] of Mogler).

30. In regard to **claim 32**, Faltings, Mogler, Anderson and Winter disclose the method according to claim 31, wherein, the computerized travel reservation system responds to the trip search based on the content representing the weight value of the criteria defining the flight (*outside claim scope, this limitation has no patentable weight*).

Conclusion

31. The Examiner requests, in response to this Office action, that support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the Examiner in prosecuting the application.

32. When responding to this Office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Garrett Smith whose telephone number is (571)270-1764. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 22, 2010

/GS/
Garrett Smith
Patent Examiner
Art Unit 2168

/Tim T. Vo/
Supervisory Patent Examiner, Art Unit 2168